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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,671	03/29/2001	Masayuki Yamada	36409-00900	4229

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EXAMINER

MCFADDEN, SUSAN IRIS

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,671

Applicant(s)

YAMADA, MASAYUKI

Examiner

Susan McFadden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment A filed 2-25-04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9-13, and 19-21 is/are rejected.
- 7) ☒ Claim(s) 4-8 and 14-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Allowable Subject Matter

1. Claims 4-8 and 14-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

2. Applicant's arguments filed 2-25-04 have been fully considered but they are not persuasive. The following rejections still exist:

3. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., power normalization) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The claims only recite that a power value is estimated for a partial segment but do not specify how this is obtained. Therefore, the prior art of record, Kosaka et al. reads on claims 1-3,9-13, and19-21.

Claim Rejections - 35 USC § 102

4. Claims 1-3,9-13, and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kosaka et al. (5,220,629).

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5. Referring to claims 1 and 11, Kosaka et al. disclose a speech synthesizing method and apparatus comprising:

The division step of acquiring partial speech segments by dividing a speech segment (col. 9, ln 3-5) in a predetermined unit (VCV or CV, col. 5, ln 18-19 and col. 16, ln 66- col. 17, ln 7) with a phoneme boundary (vowel gap between speech segments, col. 5, ln 5-7 and col. 6, ln 61-63);

The estimation step of estimating a power value of each partial speech segment (standard power value, col. 5, ln 34-37) obtained in the division step on the basis of a parameter value (power stored in parameter file, col. 5, ln 18-19 and col. 6, ln 8-9);

The changing step of changing the power value of each of the partial speech segments on the basis of the power value estimated in the estimation step (col. 6, ln 6-36); and

The generating step of generating synthesized speech by using the partial speech segments in the changing step (col. 6, ln 37-49).

Referring to claims 2 and 12, Kosaka et al. further disclose the method or apparatus, wherein in the changing step, for each of the partial speech segments, a corresponding reference power value (average power value, col. 8, ln 31-35) is acquired, an amplitude change magnification is calculated on the basis of the power value estimated in the estimation step and the acquired reference power value, and

A change to the estimated power value is made by changing an amplitude of the partial speech segment in accordance with the calculated amplitude change magnification (it is inherent that to obtain a parameter value one must change gain for

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power by the ratio (reference power/estimated power) or amplitude gain by square root thereof).

In regard to claims 3 and 13, Kosaka et al. inherently disclose the method or apparatus, discussed above, wherein in the changing step, an amplitude value of the partial speech segment is inherently changed by using, as an amplitude change magnification, s being obtained by $s = \text{Square Root}(p/q)$ where p is the power value estimated in the estimation step, and q is the acquired reference power value.

In regard to claims 9 and 19, Kosaka et al. inherently disclose the method or apparatus, discussed above, wherein the speech synthesis unit is CV/VC (col. 16, In 66-67).

In regard to claims 10 and 20, Kosaka et al. inherently disclose the method or apparatus, discussed above, wherein the speech synthesis unit is VCV (col. 5, In 18-19).

Claim Rejections - 35 USC § 103

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka et al. (5,220,629).

In regard to claim 21, Kosaka et al. disclose the method or apparatus discussed above, but do not specifically show a storage medium storing a control program for making a computer implement the method defined above. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Kosaka et al. to have a storage medium storing the control program in order to avoid the need to modify the hardware when updating the system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan McFadden whose telephone number is 703-308-6693. The examiner can normally be reached on Monday-Friday, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Susan McFadden
Primary Examiner
Art Unit 2655

March 17, 2004